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ABSTRACT

Evaluation of the Westside Area Career Occupations Project (WACOP) focused on (1) examining what aspects of the Arizona career education effort had the most significant impact on students, and (2) measuring specific outcomes related to the students' knowledge about the world of work, using the Arizona Careers Test. System implementation and student outcomes were both examined. Analysis of the counselor-consultant role in delivering career education concepts and materials to administrators, counselors, and classroom teachers was made. Student outcomes were examined in terms of career planning and preparation, student knowledge of the world of work, and the relationship between the frequency of exposure to a variety of career education activities and the students' knowledge of the world of work. Data comparisons were made with 1974-75 evaluation results. It was found that concentrating the career education efforts across all grade levels succeeded and that the delivery of career education was evenly distributed among all grade levels. The most dramatic result in 1975-76 was the constant edge that high exposure students demonstrated over low exposure peers in the areas of career planning and preparation, generalized knowledge about the world of work, self-awareness and self-confidence, and in their knowledge about several features of the occupational structure. (TA)

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WESTSIDE AREA CAREER OCCUPATIONS

PROJECT

Mr. John Glur, Director

EVALUATION REPORT 1975-76

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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CHAPTER I

INTRODUCTION

The purpose of the results discussed in this report is to assess this year's impact of the Westside Area Career Occupations Project. This is the second year in which the WACOP effort in career education has been evaluated. For this reason, throughout the report, there will be continuous comparisons with last year's results; and, where appropriate, significant longitudinal trends will be discussed. The major focus of the evaluation is twofold. First, the implementation system will be examined in order to ascertain the extent of career education activities in the catchment area during this project year. Two sets of data are germane to this issue; specifically, the extent of counselor-consultant contacts with administrators, counselors, and teachers; and the distribution of media related to self-awareness, educational awareness, career awareness, economic awareness, decision making, beginning competency, employability skills, and appreciations and attitudes toward the value of work. The second focus is related to student outcomes. Here the major question to be examined is the impact of the career education effort on students in the catchment area.

In addition to these areas of focus, two evaluation models are utilized--outcome evaluation and process evaluation. The emphasis in outcome evaluation is to determine the effect exposure to the Westside Area Career Occupations Project has on students. The process

component of the evaluation is more concerned with an examination of those aspects of the career education effort which contribute most significantly to the observed outcomes. The utilization of research data in conjunction with program planning and management is most readily accomplished when the evaluation focuses on both outcome and process considerations.

The report is organized into several chapters, beginning with a brief description of the career education model utilized by WACOP. The next section includes a discussion of the types of career education activities to which the students have been exposed during the 1975-76 school year. This includes an analysis of the counselor-consultant role in delivering career education concepts and materials to administrators, counselors, and classroom teachers. Several features of the counselor-consultant's role will be examined, such as the degree of involvement in planning and implementing career education activities, the presentation of media programs, parental involvement, curriculum development, utilizing community resources, in-service training, special programs, and providing services to career centers located throughout the catchment area.

The next section of the report will focus exclusively on student outcomes. The major considerations in this section will cover student outcomes in career planning and preparation, student knowledge of the world of work measured by the objectives specified on the Arizona

Career Education Matrix, and the relationship between the frequency of exposure to a variety of career education activities and the students' knowledge about the world of work.

METHODOLOGY

Student data are collected by means of a questionnaire which is administered to randomly drawn samples of students with varying degrees of exposure to career education. The CAREERS TEST is designed to obtain data related to the desired outcomes of the State of Arizona career education effort. From the CAREERS TEST, data are also obtained on student aspiration levels, knowledge of several career clusters, perceived levels of preparation in a variety of occupational categories, and the extent of exposure to career education activities. The CAREERS TEST has two forms and is administered as a paper-and-pencil test, with an average administration time of fifty minutes. Elementary students from grades four through seven are given the intermediate form. The secondary form is given to students in grades eight through twelve. The counselor-consultant reads the test to students in grades four through seven. The secondary form is self-administered after brief instructions have been read by the counselor-consultant. Assistance, however, is available and given to students at this level if requested. All of the student data were collected in the last half of March.

STUDENT SAMPLES

A two-stage random sample design is used to select students to be included in the evaluation. In the first stage, all schools in the catchment area are divided into high and low involvement schools, which is ascertained by the degree of participation in the WACOP project. WACOP project personnel assume sole responsibility for classifying the schools into high and low involvement. Low involvement is generally defined by minimal, or no involvement, in the career education program.

The second stage of the sampling plan involves selecting a probability, random sample of classrooms in the two conditions (high and low involvement) to be used as comparison groups. This procedure netted a total of over 1900 students from whom complete data were available. Sample losses from all sources amounted to less than four percent this year. This is an appreciable reduction from last year's loss of eleven percent. This may be primarily attributed to the counselor-consultants' greater familiarity with the procedures this year, and their diligence in obtaining clean and complete data from almost all of the students in the sample.

An additional control variable is used in selecting the student subsamples; namely, race and ethnicity. The subsamples are drawn so that none of the schools have a combined Mexican-American and Black population in excess of twenty percent. This is done to ensure against

ethnic bias in the results. All subsamples are equivalent on these dimensions.

DESCRIPTION OF THE CAREER EDUCATION PROGRAM

As is true generally of the career education effort in the State of Arizona, WACOP is designed to assist students in making the connection between academic activities and work. In-service programs for counselors, teachers, and administrators related to the goals of career education are offered throughout the year. Workshop participants are exposed to the materials available for implementing career education activities in the classroom, and are shown how to integrate these materials into the everyday, school curriculum. Comprehensive training in career education is also available to school personnel through college credit seminars, district credit workshops, and repeated individual contacts with the career education counselor-consultants working for WACOP.

Central to the career education effort in the WACOP project is the Media Center. Through the Media Center, teachers in the catchment area are given training in the goals of career education, and are given the opportunity to try career education materials in the classroom. The WACOP Media Center contains one of the most complete sets of career education materials available in the State of Arizona. In fact, the Media Center houses approximately five thousand pieces of career education materials. The available media are fairly evenly distributed

across all grade levels, and are designed to increase the students' career awareness, self-awareness, appreciations and attitudes, decision making skills, economic awareness, beginning competencies, educational awareness, and employability skills. Thus, in addition to the thousands of counselor-consultant contacts throughout the catchment area, hundreds of pieces of media are delivered to selected classrooms monthly.

The WACOP effort is geared toward urging and encouraging cooperation among parents, businesses, industry, students, and the schools. In this way, students are given an opportunity for involvement in the community, and people from the community are involved in the educational setting. One goal of the WACOP project is to change the traditional model of guidance, which sees students outside the classroom for occupational, vocational and personal counseling. The basic orientation of the WACOP model is that career guidance and classroom instruction can, and should, be one and the same.

In order to implement this model, the WACOP project depends significantly on the degree to which classroom teachers are enthusiastic about career education, and the degree to which they are willing to incorporate career education materials into the teaching program. Even if the catchment area were geographically smaller and the counselor-consultants could double their teacher contacts, the ultimate decision for implementation still rests with the individual teacher. For example,

in this project year, the counselor-consultants had in excess of forty thousand contacts with teachers, counselors, and administrators, with the largest proportion of contacts related to planning and implementing career education activities. In spite of the large number of contacts, however, it is quite clear that the counselor-consultants primarily act as catalysts. If a classroom is classified as "high involvement," it is due to the receptivity of the teacher. Thus, what the evaluation is measuring, in large part, is the success of the schools which have implemented the program; and, more specifically, the success of individual teachers. However, needless to say, this is contingent on the success of the counselor-consultant in, first, promoting career education; and, second, in assisting teachers to utilize the available materials.

CHAPTER II

IMPLEMENTATION OF THE CAREER EDUCATION PROCESS

At the beginning of the 1975-76 project year, monthly retrieval systems were established to examine two aspects of the Westside Area Career Occupations Project's delivery system. This included a system to monitor the activities of the counselor-consultants with teachers, counselors, and administrators, and a system to measure the utilization of career education materials located at the Media Center.

Each counselor-consultant is responsible for recording the types and frequency of monthly contacts with teachers, counselors, and administrators in the catchment area. These are tabulated not only by the types of activities involved, but also by the grade level of the contacts. Each counselor-consultant has his own set of retrieval forms, which are returned to Behavioral Research Associates for coding, machine storage, and data analysis on a monthly basis.

The results of this analysis, which is based on over forty thousand contacts, are presented in Table 1. The data are arranged to reflect the types of contacts, the school personnel involved in the contacts, and the grade levels of the school personnel contacted.

The data in Table 1 show that approximately eighty percent of the counselor-consultant contacts are with teachers, and forty-five percent of these are at the elementary level. The remainder are almost evenly distributed between junior and senior high school teachers.

TABLE 1. PROPORTION OF COUNSELOR-CONSULTANT CONTACTS WITH ADMINISTRATORS, COUNSELORS, AND TEACHERS IN THE DELIVERY OF CAREER EDUCATION SERVICES TO SCHOOLS IN THE WACOP CATCHMENT AREA (N= 40,000 CONTACTS)*

Group Contacted	Area Covered: Planning Activities	Implementing Activities	Media Programs	Parent Involvement	Curriculum Development	Resource Activities	In-Service	Articulation Communication	Special Programs	Career Centers	Group Totals
Administrators											
Elementary Schools	2.09	0.84	0.40	0.52	0.34	0.43	0.25	0.70	0.32	0.01	5.91
Junior High Schools	1.12	0.42	0.28	0.28	0.67	0.34	0.19	0.53	0.19	0.06	4.08
Senior High Schools	0.85	0.48	0.16	0.18	0.20	0.22	0.14	0.41	0.54	0.36	3.52
											(13.51)**
Counselors											
Elementary Schools	0.07	0.07	0.02	0.07	0.12	0.01	—	0.02	0.03	—	0.40
Junior High Schools	0.04	0.02	—	0.03	0.07	0.02	0.01	—	0.03	0.02	0.24
Senior High Schools	1.98	0.71	0.39	0.16	0.31	0.63	0.39	0.21	0.15	0.88	5.82
											(6.46)
Teachers											
Elementary Schools	11.58	4.24	8.21	4.12	3.22	1.43	8.26	2.81	1.42	0.01	45.30
Junior High Schools	5.28	2.37	2.98	0.54	1.03	1.31	1.26	1.81	1.10	0.06	17.74
Senior High Schools	3.95	1.54	2.61	0.36	0.84	1.11	3.02	0.57	1.67	1.30	16.99
											(80.03)
Area Totals	26.97	10.68	15.05	6.27	6.79	5.51	13.53	7.06	5.45	2.70	100.00

* Percents of less than .01 are indicated by a dash.
All percentages are rounded from four figures to right of decimal point.

** Numbers in parentheses are subtotals for each major group (Administrators, Counselors and Teachers)

The least number of contacts are with school counselors. This outcome is expected, particularly since most elementary schools lack school counselors, and because the decision to implement career education activities ultimately rests with administrators and classroom teachers. On the other hand, this is one of the areas in which the WACOP career education effort has fallen short of its goals. As is true of other career education projects throughout the State, school counselor involvement in the overall career education effort is weak. For several years now, the evaluation of a number of career education projects has revealed that counselor involvement has been negligible.

The data in Table 1 also shows that the types of contacts primarily focus around planning career education activities, preparing media programs for use at the classroom level, in-service training, and the actual classroom implementation of career education activities. In fact, approximately thirty-eight percent of all contacts were related to planning and implementing career education activities in the classroom. Converted to numbers, this means that in the current project year, WACOP consultants had over fifteen thousand contacts with administrators, counselors, and teachers in planning and implementing career education activities. Broken down further, each of the nine consultants averaged almost seventeen hundred contacts over the year, related to these two activities, or approximately one hundred and seventy contacts a month.

If we look at the way in which the contacts are distributed by grade level, the data shows that the WACOP consultants are concentrating their efforts proportionally to the number of schools at each grade level in the catchment area. In other words, the delivery of career education seems to be evenly distributed across all grades given the proportion of schools at the elementary, junior high, and senior high school levels.

As part of last year's evaluation, it was learned that media distribution was unevenly distributed, with elementary students receiving most of the input. This was reflected in the findings, which showed that high involvement elementary students did far better than their peers with low involvement, while the differences between high and low involvement students at the secondary level were more modest.

The idea to systematically monitor the counselor-consultants' activities monthly was stimulated by the finding, last year, that the career education process was more fully implemented at the elementary level. Introduction of this system has apparently paid off. As will be seen in later chapters, the findings this year show that the differences between high and low involvement secondary students are no longer modest. In fact, on every index used to measure student knowledge across each of the career education elements, secondary students with high career education involvement did significantly better than secondary students with minimal career education exposure. Last year's data

shows . t secondary, high involvement students were significantly different on five out of the twelve indices used to measure student impact. This year, the data shows high involvement, secondary students are significantly different on all twelve indicators.

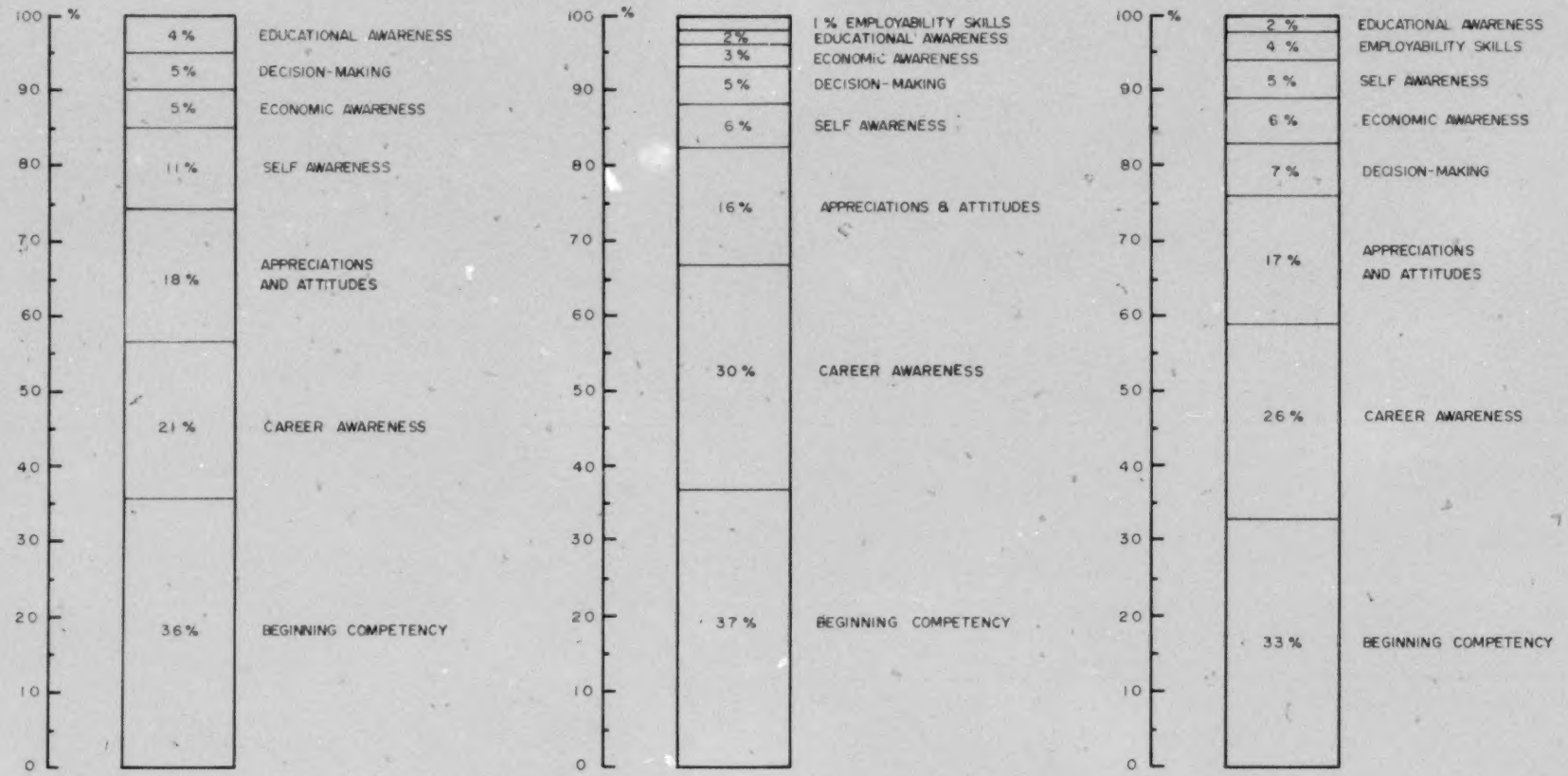
Utilization of Media Center Materials

Over ten thousand pieces of career education materials were distributed through the Media Center to classrooms in the catchment area this year. The distribution of these materials was classified according to the types of media used such as kits, books, films, cassettes, shoebox kits, posters, pamphlets, film loops, instructional units, career cluster boxes, mini-labs, and miscellaneous career education materials. These data were cross tabulated with the career education elements covered by the materials, and separate tabulations were kept for students in senior high school, junior high school, and elementary schools.

Figures 1A, 1B, and 1C show how the combined materials actually used at the different grade levels were distributed across the career education concepts covered. Among all students, the career education elements emphasized most by the media are beginning competencies and career awareness. In addition, the emphasis on appreciations and attitudes toward the value of work is about equal among all students, as is the emphasis on economic and educational awareness and decision making. There are some differences in the focus among the separate

FIGURES Ia, Ib, Ic PROPORTION OF CAREER EDUCATION CONCEPTS COVERED BY SEVERAL EDUCATIONAL MEDIA

(SEPTEMBER 1975 — MAY 1976)



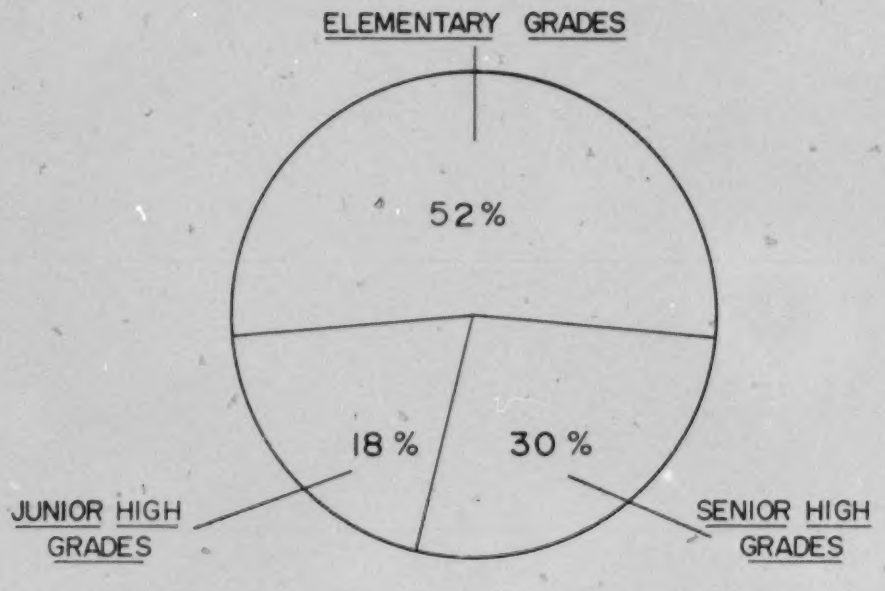
grade levels, but for the most part, the career education concepts are covered with uniform emphasis. Notable exceptions occur in the areas of self-awareness and employability skills. Greater emphasis is given to the former among elementary students, while greater emphasis is given to employability skills among senior high school students.

This concentration of effort is reflected in student scores related to the career education matrix, which are discussed in a later chapter. The highest scores are always in the area of career awareness. There are no measures of beginning competencies in the CAREERS TEST. If there were, it would be safe to predict that the highest scores would occur in this area based on the emphasis given to beginning competency by the media distributed to classrooms in the catchment area.

The findings, presented in Figure 2, show that media was distributed approximately equal to the number of grades at each grade level in the current project year. For example, the elementary grades are usually covered by grades K through six, which constitutes fifty-four percent of the population. This year, fifty-two percent of the distributed media went to classrooms at this level. Senior high school generally includes four grade levels, or about thirty-one percent of the population. The data in Figure 2 shows thirty percent of the media was distributed at this level. Junior high school usually encompasses from fifteen to twenty-three percent of the population. Eighteen percent of the career education media was distributed at this level.

FIGURE 2

DISTRIBUTION OF CAREER EDUCATION MEDIA BY GRADE LEVEL



SEPT. 1975 — MAY, 1976

CHAPTER III

CAREER PLANNING AND PREPARATION

The effectiveness of the WACOP effort in career education is measured in several ways. Data are collected from students to ascertain what they have learned about the world of work, to see how participation in the program has facilitated their career planning and preparation, and to see if participation in the career education process influences the students' confidence that their career choices and educational plans are achievable. The first of these points to be considered is the influence the WACOP project has had on career planning and preparation.

One objective of the WACOP effort in career education is to expose students to a variety of career education related activities, and to provide classroom teachers with in-service training programs and individual consultations on how to incorporate career education concepts into the regular curriculum. The importance of encouragement from teachers and counselors is also emphasized; and, hopefully, a school environment is created where encouragement occurs, where counselors are seen as easily accessible for occupational and educational counseling, and where students take advantage of the services available to them.

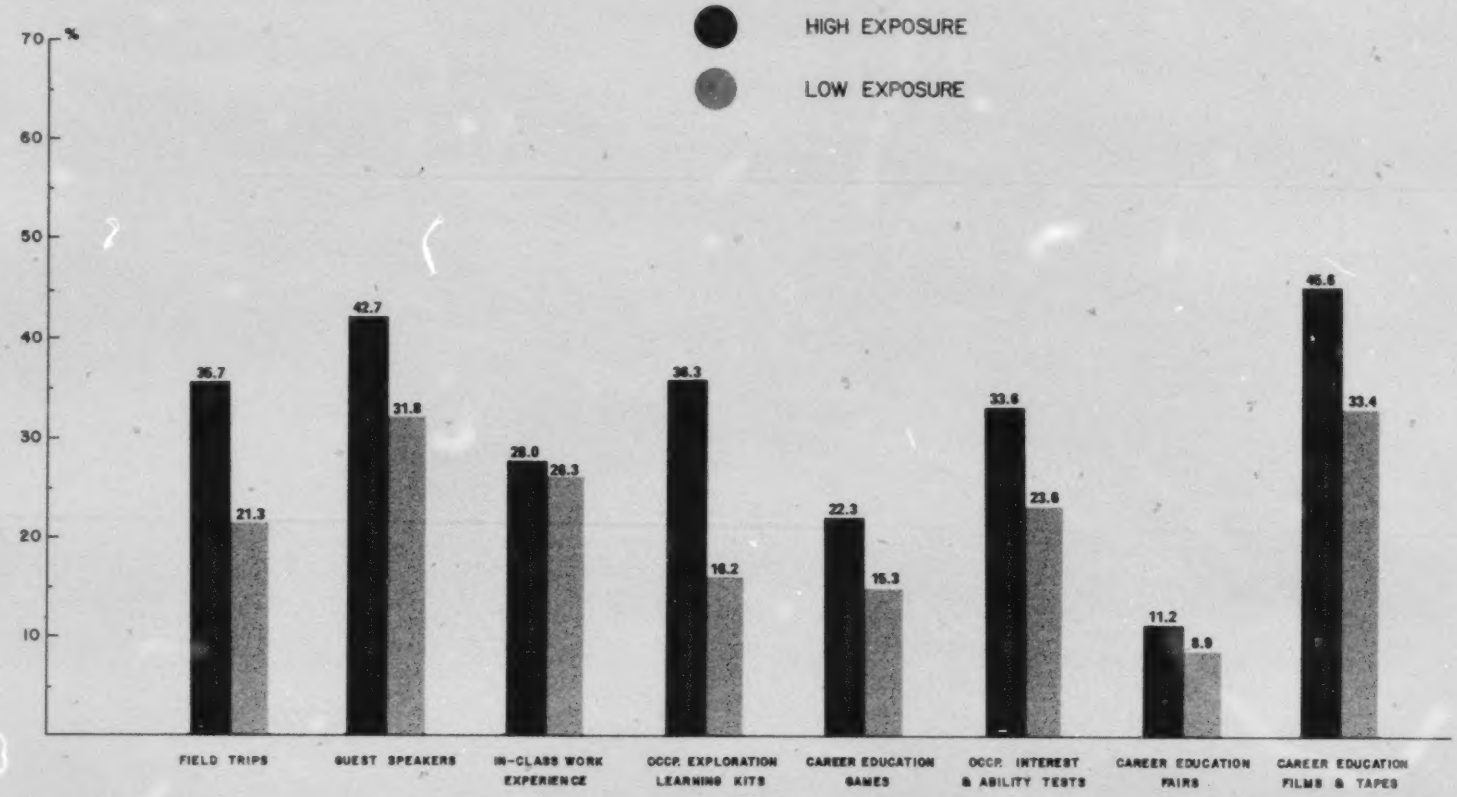
Students at the secondary level are asked to evaluate whether or not participation in a career education activity helped them plan for a job in the future. Eight types of activities are considered, ranging from field trips to career education films and tapes. The examination of these data gives an indication of how the students perceive the

relationship between exposure to a career education activity and its help in planning for a job in the future.

Unlike last year's results, the findings, presented in Figure 3, show that high exposure students are more apt to evaluate these activities as helpful in planning for a job in the future than low exposure students. The differences between the two groups are significant across each of the activities being considered. The differences in Figure 3 cannot be attributed to the frequency of exposure to each of the activities between the two groups alone. Although it is true that high exposure students go on more field trips, hear more speakers, participate in more in-class work experiences, etcetera, the difference in exposure rates between the two samples is not astronomically large. Thus, it is not the quantity of exposure that accounts for the differences seen in Figure 3. It is undoubtedly related to the quality of the exposure. Teachers in the high exposure group receive more assistance from the career education project, and are themselves instructed on the connection between the various types of activities and the world of work, which is then communicated to the students. Another feature which may be operating here is that teachers in the high exposure group are more committed to the goals of career education. This commitment is no doubt related to the way in which career education activities are presented at the classroom level.

The data in Figure 3 shows that high exposure students evaluate each of the activities as more helpful in planning for a job. The

FIGURE 3 PROPORTION OF STUDENTS THAT REPORTED A CAREER EDUCATION ACTIVITY HELPED IN PLANNING A FUTURE CAREER (SECONDARY STUDENTS)



probability that this result would happen by chance is slim. The two groups of students, high and low involvement, are equivalent in every social characteristic except for the degree of involvement in career education. Thus, the differences are best explained by exposure to the career education process.

In addition to evaluating the activities as more helpful, the high exposure group differences between last year and this year are also significant. For each activity, a larger proportion of high exposure students reported the activity as helpful this year.

The activities seen as the most helpful are career education films and tapes, guest speakers, in-class work experiences, field trips, and occupational interest and ability tests. The least helpful activities are seen as career education fairs and career education games.

The finding on career fairs is interesting for it does not dovetail with the findings reported in another section, which shows career fairs as the most influential activity on the students' generalized knowledge about the world of work. However, generalized knowledge should not be confused with planning for a specific career. Career fairs are more likely to present a smorgasbord of the economic marketplace. Consequently, more generalized knowledge may be gleaned. On the other hand, films, guest speakers, and in-class work experiences are more apt to focus on specific occupations; thus, more helpful in planning for a specific career. The important thing is that different

activities seem to generate different knowledge, some of it general and some specific.

Knowledge of Career Clusters

One of the major goals of career education is to expand the students' conceptualization of the range of occupations available, and to increase the students' understanding of the preparations involved in getting a variety of jobs. Exposure to career education introduces students to a wide spectrum of occupational clusters. The WACOP project is geared toward introducing students to the worlds of health, business, public service, manufacturing, mass media and communications, natural resources and environment, construction, arts and humanities, and transportation.

As in last year's evaluation, students from grades four through twelve were asked a series of questions to determine their knowledge in nine occupational clusters. The findings for secondary students are presented in Figure 4, and for students in grades four through seven, the data are presented in Figure 5.

Dramatic changes occur in the findings this year, particularly among secondary students. Last year, the data showed that there were modest differences between high and low exposure secondary students, and in some occupational clusters there were either no differences, or the low group was more knowledgeable. The findings, shown in Figure 4, indicate that high exposure secondary students are more knowledgeable

FIGURE 4 PROPORTION OF STUDENTS DEMONSTRATING KNOWLEDGE WITHIN NINE CAREER CLUSTERS

(SECONDARY STUDENTS)

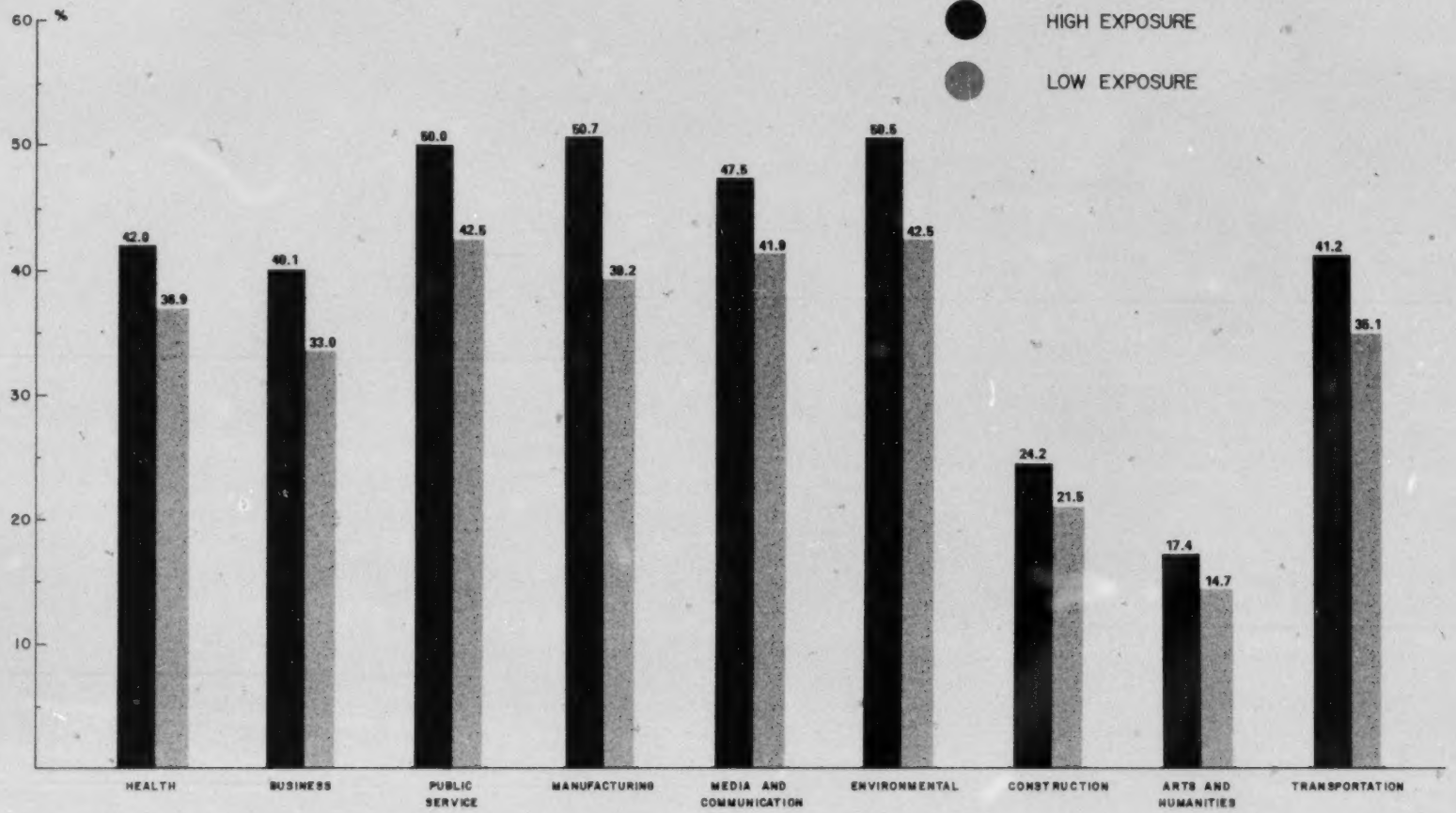
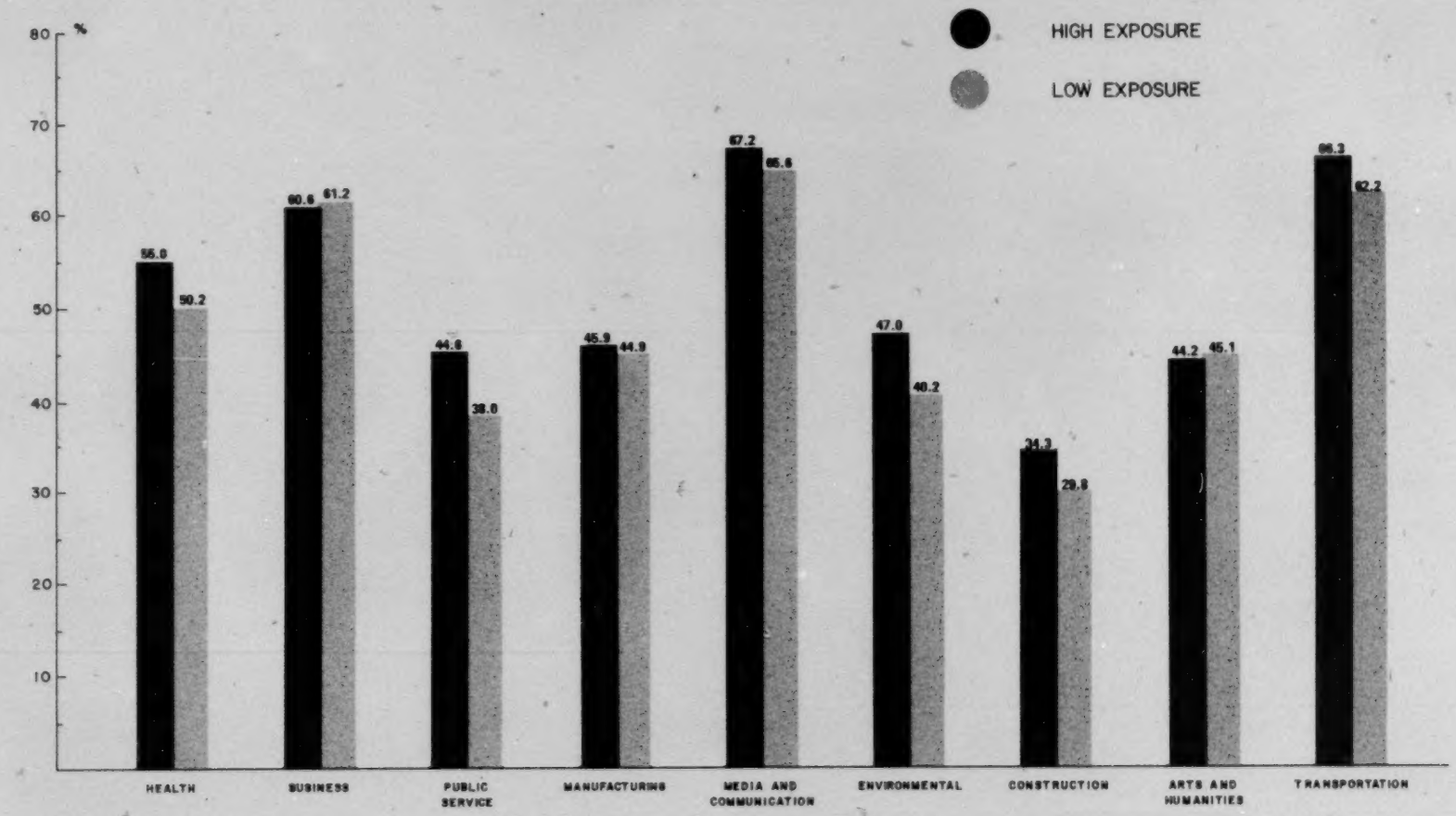


FIGURE 5 PROPORTION OF STUDENTS DEMONSTRATING KNOWLEDGE WITHIN NINE CAREER CLUSTERS

(ELEMENTARY- INTERMEDIATE STUDENTS)



in each of the nine career clusters this year. These students are most knowledgeable about jobs that are included in the areas of public service, manufacturing, and environment. Secondary students display the least knowledge about jobs in arts and humanities and construction. This trend is identical to last year, with the notable exception that high exposure is indicative of greater knowledge across all clusters.

Strategies should be introduced next year which will continue the trend seen this year, and which will increase student knowledge in the fields of construction and arts and humanities. A broad conceptualization of the economic marketplace is contingent upon high student knowledge across the whole range of occupational clusters. Although comparisons with last year's findings show that there has been a slight increase among high exposure students in the areas of construction and arts and humanities, the majority of students are still uniformly weak in the identification of jobs in these two clusters.

The findings for elementary and intermediate students are presented in Figure 5. The differences at this level are more modest this year. However, the trend is clear--high exposure to career education results in greater knowledge in seven out of the nine occupational clusters for which data were collected. Although the differences are not as dramatic as among high and low exposure secondary students, the differences are still impressive. For one, they are consistently in favor of the career education effort; and, second, the two samples are equivalent except for career education exposure.

Among elementary and intermediate students, project efforts should be directed next year toward increasing student awareness in the areas of public service, manufacturing, environmental occupations, and construction. These are the areas in which elementary students are least knowledgeable for the second year.

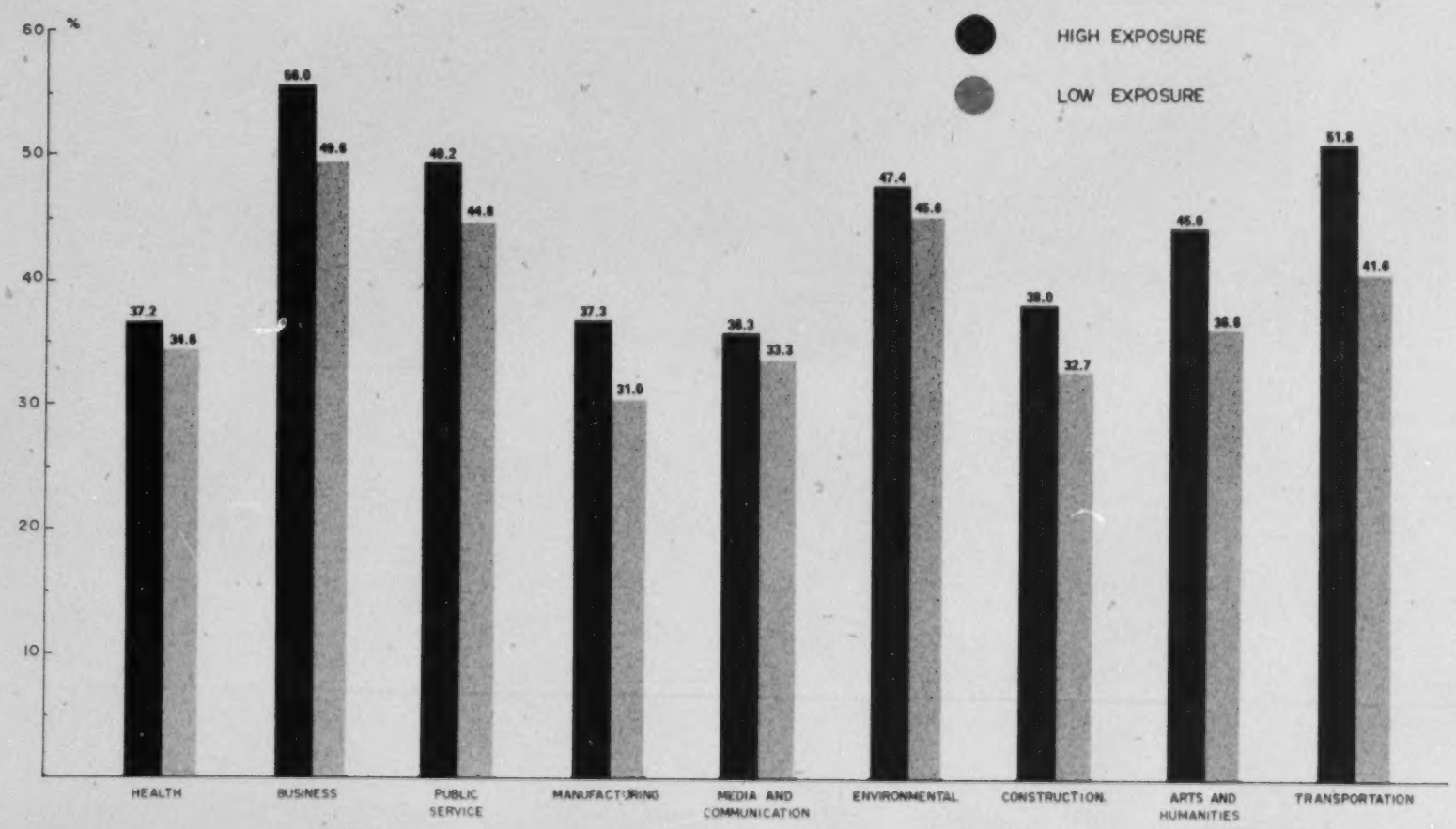
Occupational Preparation

Another measure of the success of the WACOP career education effort is to see if students with the most exposure to the program perceive they are better prepared to enter jobs in a variety of occupational clusters than students minimally exposed to the career education effort. Occupational preparedness data are collected from junior and senior high school students only. Employment possibilities are so remote for younger students that questions in this area would have little salience.

Before discussing the findings reported in Figure 6, it should be reported that high and low exposure students are not significantly different in their occupational interests. In other words, occupational aspirations between the two groups are equivalent, and an almost equal percentage of students in the two samples report they are interested in the nine occupational clusters.

This finding increases the significance of the results reported in Figure 6. Specifically, although the two subsamples have identical levels of interest in the nine occupational clusters, high exposure students uniformly report they are better prepared for employment in

FIGURE 6 PROPORTION OF STUDENTS REPORTING ADEQUATE PREPARATION FOR EMPLOYMENT IN NINE CAREER CLUSTERS (SECONDARY STUDENTS)



each of these areas. Last year, the data showed the low group felt better prepared in all but one cluster--business. This trend has been sharply reversed during the current project year.

Students report they are best prepared to assume jobs in business and transportation, given their present level of employability skills. They are least prepared to assume jobs in health, manufacturing, mass media, and construction. This is not surprising, since jobs in these fields often require highly specialized training, which is rarely available as a part of secondary education.

Teacher and Counselor Influences

A crucial link in the career guidance of students is the classroom teacher and the school counselor. As a philosophy of education, career education recognizes the importance of classroom teachers and counselors in creating a positive school environment where student counseling and guidance is facilitated. In previous years, the evaluation data from several career education projects indicated that a large number of students were unaware of the availability of counselors in their schools; and among the remaining students, the majority saw the counselors infrequently, or not at all.

The data, presented in Figure 7, shows that approximately twelve percent of the students in the WACOP catchment area report there are no guidance counselors in their schools. Data kept by the project confirms that this number is approximately correct for the schools

FIGURE 7 DIFFERENCES IN STUDENT--COUNSELOR CONTACTS (SECONDARY)

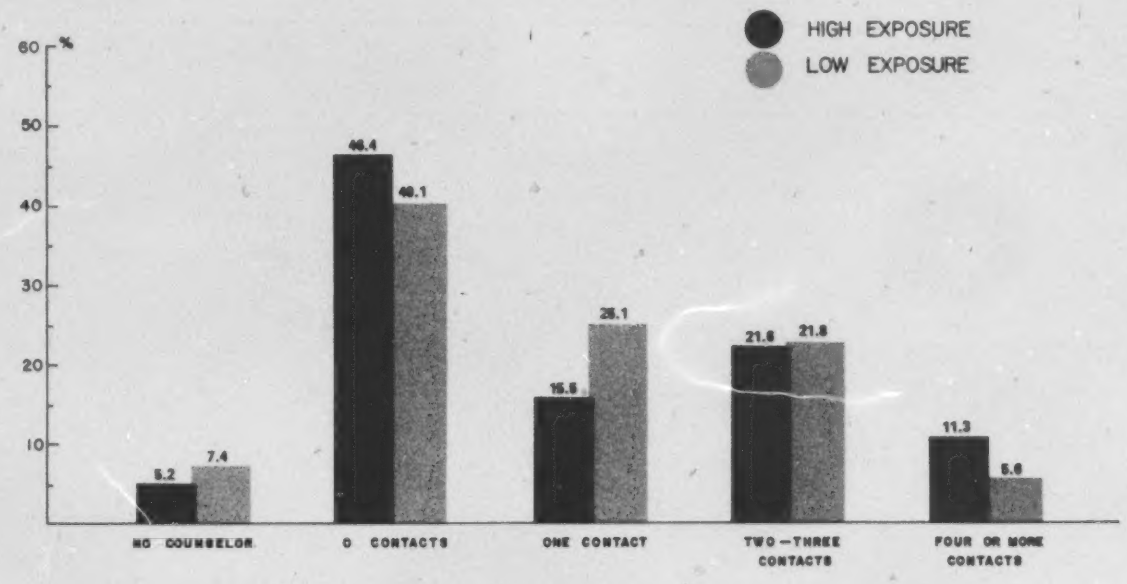
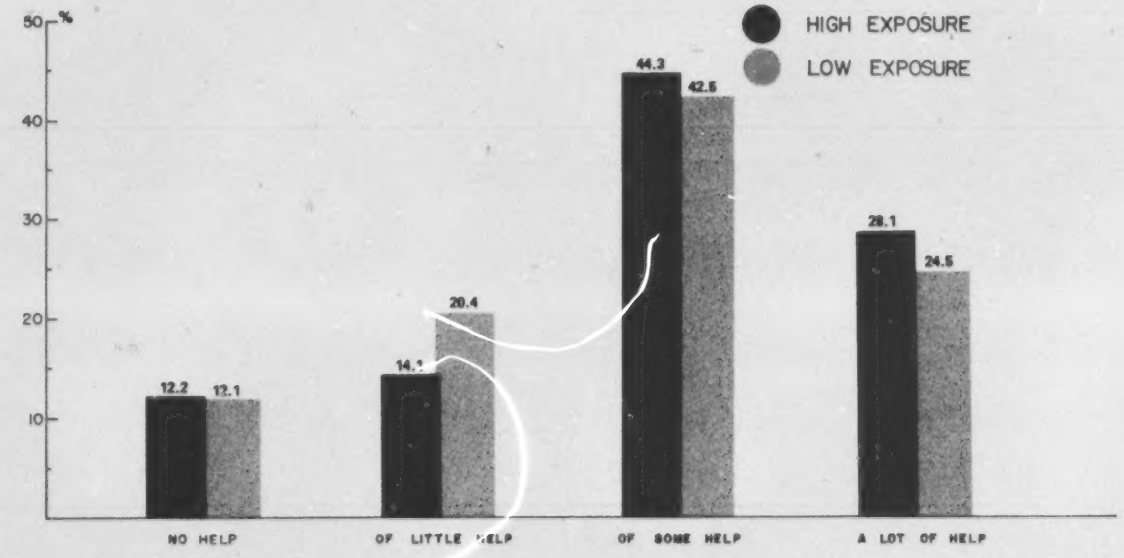


FIGURE 8 STUDENT EVALUATIONS OF INTERACTION WITH COUNSELORS (SECONDARY)



included in this year's sample. The findings in Figure 7 also show that the majority of students, whether high or low exposure, did not see a school counselor during the year. The students are only asked about counselors contacts related to occupational and educational goals. Disciplinary contacts are not included in the analysis. The findings in Figure 7, however, reveal that high exposure students utilize the services of counselors more frequently than low exposure students. For example, fewer high exposure students report they have had only one contact with a school counselor, and over twice as many high exposure students report they have had four or more contacts with counselors. This difference is significant and reverses the trend seen in last year's data, where a larger proportion of the low exposure students reported they had multiple contacts with school counselors.

While these data are encouraging, there is still considerable room for improvement, since the majority of students do not utilize counselors at all in conjunction with their educational and occupational future plans. In the previous chapter, we saw that the counselor-consultants spent very little time with school counselors. In order to get students to more effectively use school counseling staffs, it may be first necessary to increase the counselors' visibility in the career education process.

Although the frequency of contacts with school counselors leaves a lot to be desired, the findings in Figure 8 clearly show that

exposure to career education improves the quality of the interaction with school counselors. These findings suggest that the career education program facilitates meaningful contacts between students and counselors. Fewer students in the high exposure group reported the contacts they had with counselors were of little help. Conversely, a larger proportion of high exposure students reported their contacts were either of some help or a lot of help. This trend is in the desired direction and opposite last year's results.

Additional data pertinent to the relationship among students, counselors and teachers is reported in Figure 9. First, the majority of high exposure students received some form of encouragement from their teachers and counselors to continue their education after graduation from high school. This is not true for low involvement students. The majority of students with low career education exposure reported they received no encouragement from their teachers or counselors.

The encouragement students received is not totally oriented toward college. For every two students encouraged to attend college, one student is encouraged to attend business or technical school. In previous years, the ratio was three to one. This shift in college emphasis may be partly attributed to the general knowledge that there is a surplus of college graduates in almost every field, and to the efforts of career education programs throughout the State, where the emphasis has been to expand the conceptualization of the economic marketplace among students, teachers, and counselors.

FIGURE 9 ENCOURAGEMENT GIVEN BY COUNSELORS & TEACHERS (SECONDARY)

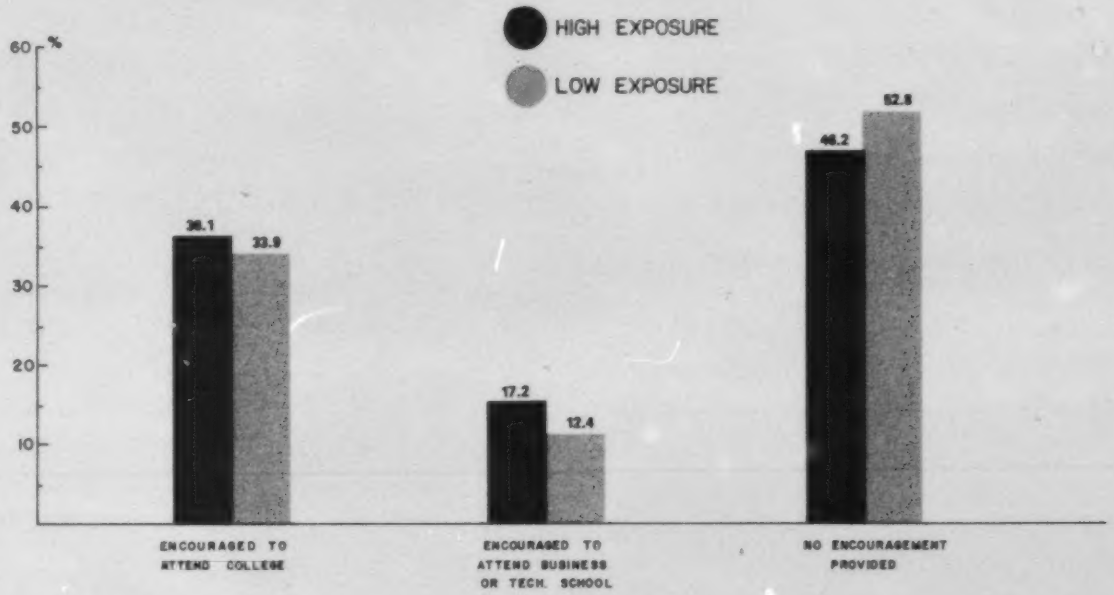
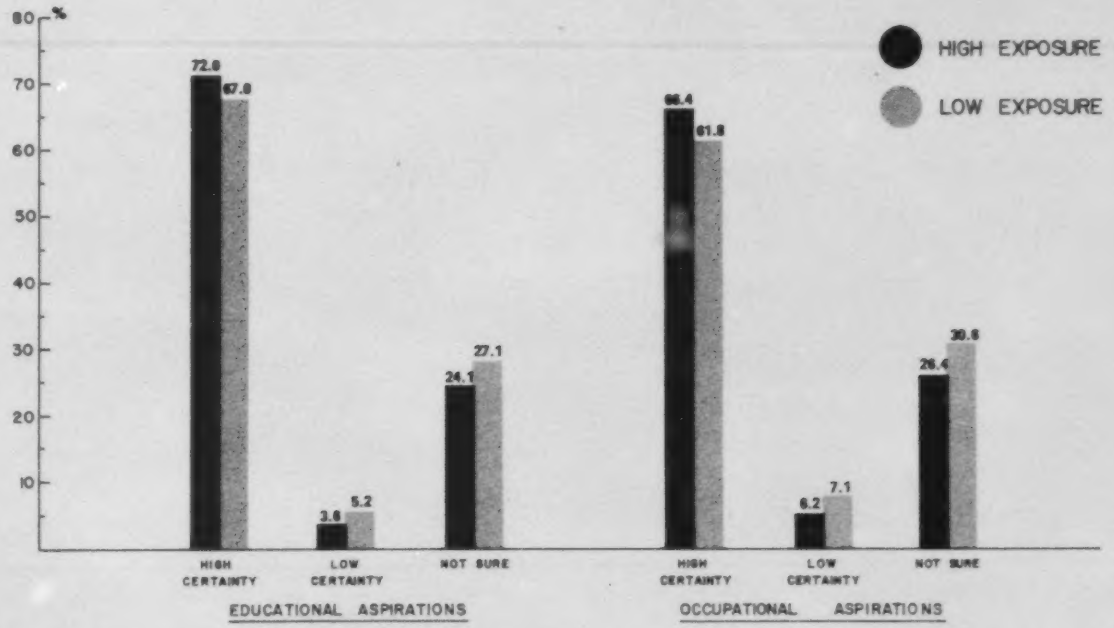


FIGURE 10 DIFFERENCES IN CERTAINTY OF ACHIEVING ASPIRATIONS (GRADES 4–12)



The findings in Figure 9 show that thirty-nine percent more of the high exposure students are encouraged to attend non-college, post-secondary training programs. The difference in proportions between high and low exposure students encouraged to attend college is much smaller. Only six percent more of the high exposure students are encouraged to attend college.

Thus far, several of the reported findings indicate the WACOP project has made significant changes in the delivery system of career education at the secondary level. In just about every measure of effectiveness considered in this chapter, there have been changes from last year, with high exposure secondary students doing better than their peers who have had minimal exposure to career education.

Certainty of Occupational and Educational Aspirations

In previous reports, we have emphasized that to be effective, career planning and preparation involves at least three stages. First, students need to have some knowledge of the wide range of occupations in a society. Second, students have to decide on their own occupational and educational aspirations. And, finally, students need the self-confidence that their expectations are attainable.

The data presented earlier indicates that high exposure students are more knowledgeable about a variety of occupational clusters. An examination of future occupational choices and educational aspirations shows that the majority of students have made clear decisions in both

areas. However, there are no significant differences between the two groups. An almost equal percentage of students, whether high or low in career education exposure, have comparable occupational and educational aspirations. There are differences, however, in the certainty that occupational and educational aspirations will be attained. These results are presented in Figure 10.

Last year, the data showed that high exposure students, across all grade levels, were more certain their educational and occupational aspirations would be attained. The differences, however, were quite modest, and in most cases, amounted to less than one percent. The findings, this year, indicate that the differences between the two exposure groups are larger, with a consistent trend favorable to the career education program. For example, a larger proportion of high exposure students have a high degree of certainty that their occupational and educational aspirations are attainable, and fewer high exposure students are in the "low certainty" or "not sure" categories. However, almost twenty-five percent of the students, even among those in the high exposure group, lack self-confidence in attaining their educational and occupational aspirations. This is the second year this figure has been so high. In the next project year, WACOP staff should design strategies to work more effectively with both classroom teachers and counselors to improve the self-awareness and self-confidence of students. One way to accomplish this is to either develop or obtain more materials

directed toward self-awareness. At present, approximately ten percent of the materials in the Media Center is geared toward self-awareness, which is less than the expected proportion if the materials were divided evenly across the eight career education elements in the State Matrix. This figure is appreciatively lower if we look at the percentage of media directed toward self-awareness in grades nine through twelve, which is only two percent. More will be said about self-awareness in the next section of the report.

CHAPTER IV

KNOWLEDGE OF THE WORLD OF WORK

The CAREERS TEST is designed to furnish data on most of the career education elements specified in the State of Arizona's Career Education Matrix. According to the Matrix, the focus of career education is on self-awareness, educational awareness, career awareness, economic awareness, decision making, employability skills, beginning competency, and attitudes and appreciations toward the value of work. The CAREERS TEST does not contain a measure of beginning competencies, which is defined as developing the necessary skills for employment in the field of the student's choice. This is a difficult area to measure given the reality that a vast majority of jobs require some post-secondary training. A definition of the remaining career education elements is given below.

1. Self-Awareness is related to the students' ability to identify the responsibilities he has to himself such as to perform to the best of his ability in school. It includes being able to evaluate career goals in conjunction with self interests, perceived brightness, and self-confidence.
2. Educational Awareness involves knowledge related to the specific educational preparations necessary for a multiplicity of careers. To be complete, the student should be aware of the relationship between educational levels and occupational tasks.

3. Career Awareness involves possessing knowledge of the skills required in a variety of jobs. It also includes a personal understanding of the satisfaction associated with different careers, the requirements for job success, and the common elements involved in related occupations.

4. Economic Awareness demonstrates that students are familiar with the economic rewards derived from different kinds of work, and that students have developed an awareness of the advantages and disadvantages of certain occupations.

5. Decision Making involves an understanding by students that they are responsible for the outcomes of their decisions, particularly in the area of career choices. The student demonstrates how the use of resource information is related to making career decisions, and is knowledgeable about the amount of decision making associated with different jobs.

6. Employability Skills demonstrates student awareness of the level of self-preparation for employment in several occupational clusters, and the student's ability to discriminate between an entry level job and the occupational mobility related to jobs within a cluster.

7. Appreciation and Attitudes involves an understanding of the interdependency of jobs within a community, the relationship between continual learning and professional satisfaction,

and an awareness of the forces influencing career mobility.

Additional scales were constructed to measure student knowledge and interest in nine career clusters. All scales are standardized so that a score of one hundred equals a perfect score.

Self-Awareness

Before we look at student outcomes related to educational awareness, career awareness, economic awareness, decision making, employability skills, and appreciation and attitudes, some additional data will be presented on self-awareness.

In the preceding chapter, data were presented on the certainty of attaining educational and occupational aspirations. The findings indicated high exposure students were more certain of attaining their occupational and educational goals across all grade levels. Two additional indices of self-awareness are reported in Figures 11 and 12. The data in Figure 11 reports the differences in perceived brightness among secondary students with high and low exposure to career education. The findings in Figure 12 report on the self-expectations for scholastic performance among all students, grades four through twelve, with high and low exposure.

The findings in Figure 11 show that a larger proportion of high exposure students saw themselves as either above average or average in brightness when comparing themselves to their peers. Conversely,

FIGURE 11 DIFFERENCES IN PERCEIVED BRIGHTNESS (SECONDARY)

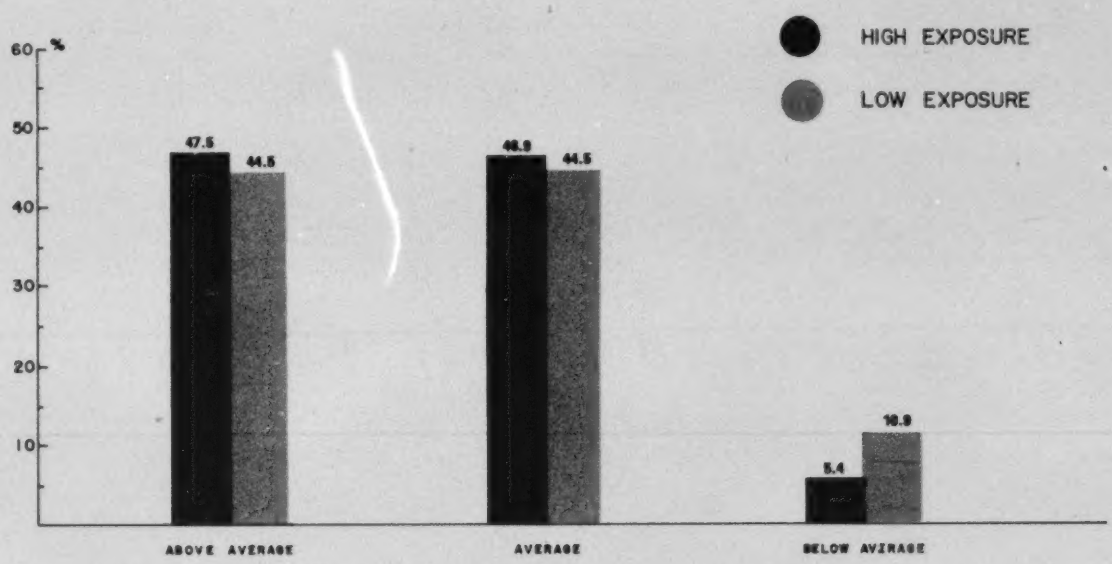
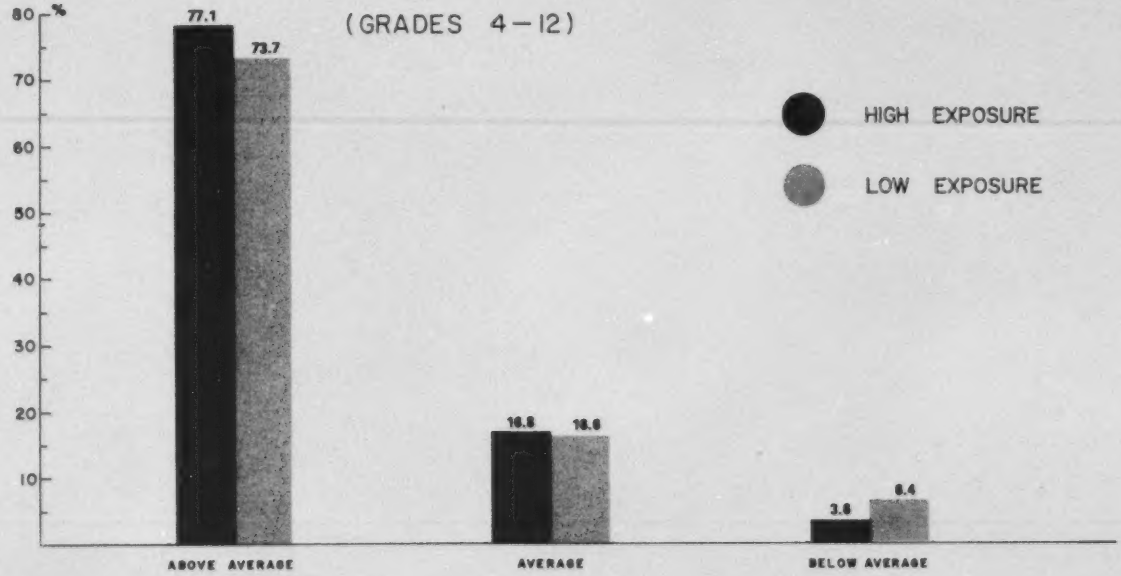


FIGURE 12 SELF-EXPECTATIONS FOR SCHOLASTIC PERFORMANCE

(GRADES 4–12)



approximately twice as many low exposure students saw themselves as "below average." Although the differences reported here are not very large, there has been a shift from last year, and the trend is clearly favorable to the WACOP career education effort.

The data related to expectations for school performance are similarly more favorable for students with high career education exposure (see Figure 12). Students in this category expect higher scholastic performance from themselves, and almost twice as many low exposure students expect "below average" performance. Again, the differences are directionally favorable to the career education effort, but too small to be statistically significant.

All of the data related to self-awareness indicates trend differences between high and low exposure groups, but the differences have not reached the magnitude of those found between the two groups on the remaining career education elements. This is also true for the findings reported last year at WACOP and other career education programs, which have been similarly evaluated. In short, program effectiveness in the area of self-awareness is weaker than program effectiveness in the areas of educational awareness, career awareness, economic awareness, decision making, employability skills and appreciations and attitudes toward the value of work.

Student Differences on Career Education Goals

The findings, reported in Table 2, show the mean differences between high and low exposure students on a number of dimensions related to the goals of career education. The scale dimensions are labelled in the table according to the career education elements for which the various scales are indicators. In some cases, the career education element being considered has multiple indicators, which are set off in brackets. This is true among all students in the area of career awareness; and for the economic awareness dimension, among secondary students.

The mean scores, shown in Table 2, are standardized so that a perfect score on any scale equals one hundred. Last year, the data indicated that the only mean differences that were statistically significant at the secondary level were the scales related to career awareness, appreciations and attitudes and knowledge of career clusters. On the other hand, all scale score differences were statistically significant at the elementary-intermediate level.

As we can see from the data in Table 2, the findings this year reflect more favorably on the WACOP career education effort. All differences are statistically significant across all grade levels, with high exposure students scoring higher on every dimension. Most of the differences are significant at the .01 level, which means that the observed differences may be due to chance only one time out of a hundred. If we bear in mind that the two samples are characteristically similar

TABLE 2. COMPARISON OF STUDENTS WITH HIGH AND LOW EXPOSURE TO CAREER EDUCATION ON SEVERAL INDICES RELATED TO THE ARIZONA CAREER EDUCATION MATRIX*

	Matrix Elements	High Exposure Sample	Low Exposure Sample	t-test	Significance
		Secondary Students			
	Educational Awareness	51.7	45.2	3.80	.01
Career Awareness	Knowledge of Skills Req.	61.0	53.2	4.79	.01
	Knowledge Factors Contributing to Job Satisfaction	69.9	62.3	4.20	.01
	Common Threads in Jobs	69.5	61.5	4.38	.01
Economic Awareness	Economic Awareness	57.4	50.5	3.77	.01
	Awareness of Career Mobility	42.4	36.7	3.18	.01
	Awareness of Factors Influencing Occup. Structure	56.7	48.8	4.37	.01
	Decision Making	37.4	33.4	2.95	.01
	Employability Skills	25.8	23.9	3.72	.01
	Appreciations & Attitudes	47.0	42.3	2.96	.01
	Knowledge of Career Clusters Score	39.3	33.8	3.80	.01
	Interest in Career Clusters Score	24.3	23.6	1.88	.06

TABLE 2. (Continued)

	Matrix Elements	High Exposure Students	Low Exposure Students	t-test	Significance
	Elementary/Intermediate Students				
Career Awareness	Educational Awareness	49.7	45.1	2.97	.01
	Knowledge of Skills Req.	61.1	55.2	3.27	.01
	Knowledge of Factors Contributing to Job Satisfaction	54.7	49.0	3.57	.01
	Common Threads in Jobs	66.0	61.7	2.22	.02
	Economic Awareness	55.3	51.0	2.52	.02
	Decision Making	60.1	54.4	3.16	.01
	Appreciations & Attitudes	61.5	55.0	3.46	.01
	Knowledge of Career Cluster Scores	51.2	48.1	1.80	.06

* All tests of significance were computed conservatively as two tailed tests.

with the exception of career education exposure, the findings in Table 2 are even more impressive. These findings offer added evidence that protracted efforts have been taken this year to implement the career education process across all grade levels in the WACOP catchment area.

As is true of last year, the highest scale scores occur on those dimensions related to career awareness. This finding is not surprising given the distribution of career education materials in the Media Center. Sixteen percent of all materials focus on the concept of career awareness. This figure represents a disproportionate allocation of materials, however, it is also a function of the commercial materials available in career education, which are disproportionately oriented toward career awareness.

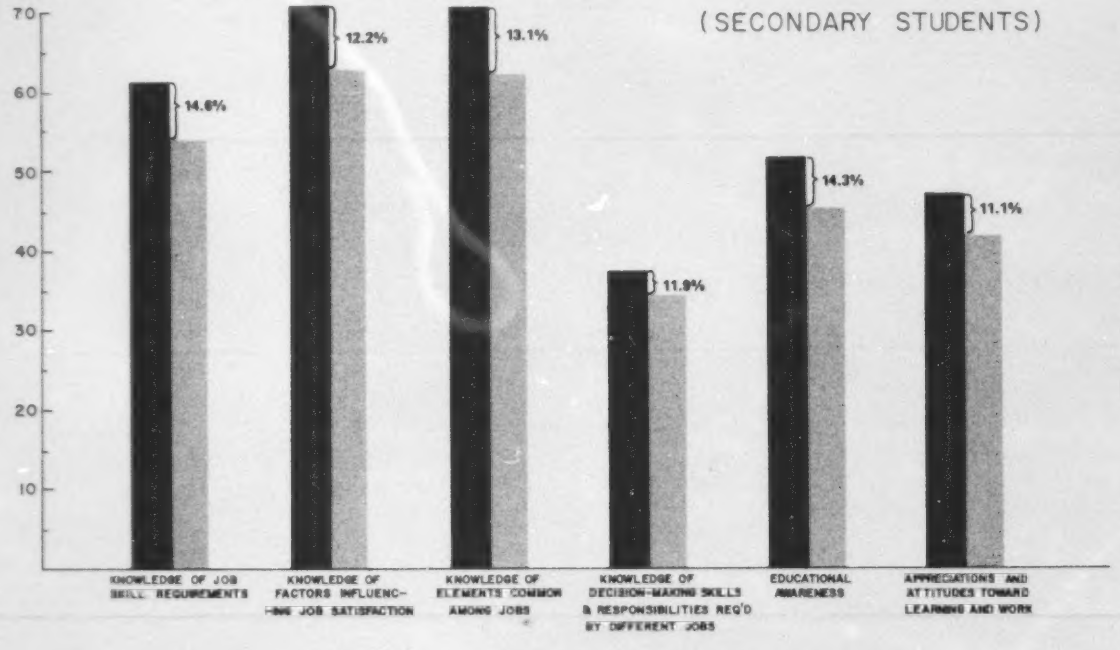
The findings reported here speak favorably to two issues. First, the materials work, witness the higher scale scores on the dimensions for which the largest proportion of media are available. And, second, all scale scores are higher among students where the career education effort has been more fully implemented.

These findings are presented alternatively as percent differences between the two exposure groups in Figures 13 and 14. The purpose of this analysis is to see how much better high involvement students did on each of the dimensions than low involvement students.

Last year, the percent difference between the two exposure groups at the secondary level was fairly modest. On some of the

FIGURE 13 DIFFERENCES IN KNOWLEDGE ON DIMENSIONS OF THE WORLD OF WORK

(SECONDARY STUDENTS)



STUDENTS WITH HIGH EXPOSURE

STUDENTS WITH LOW EXPOSURE

PERCENT DIFFERENCE BETWEEN GROUP MEAN SCORES

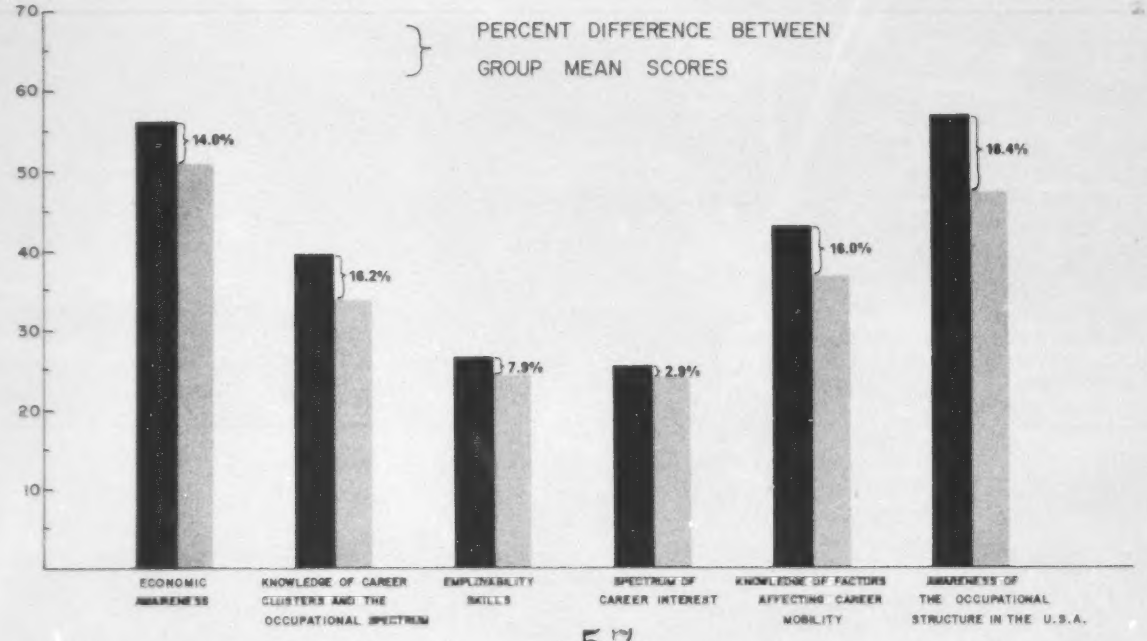
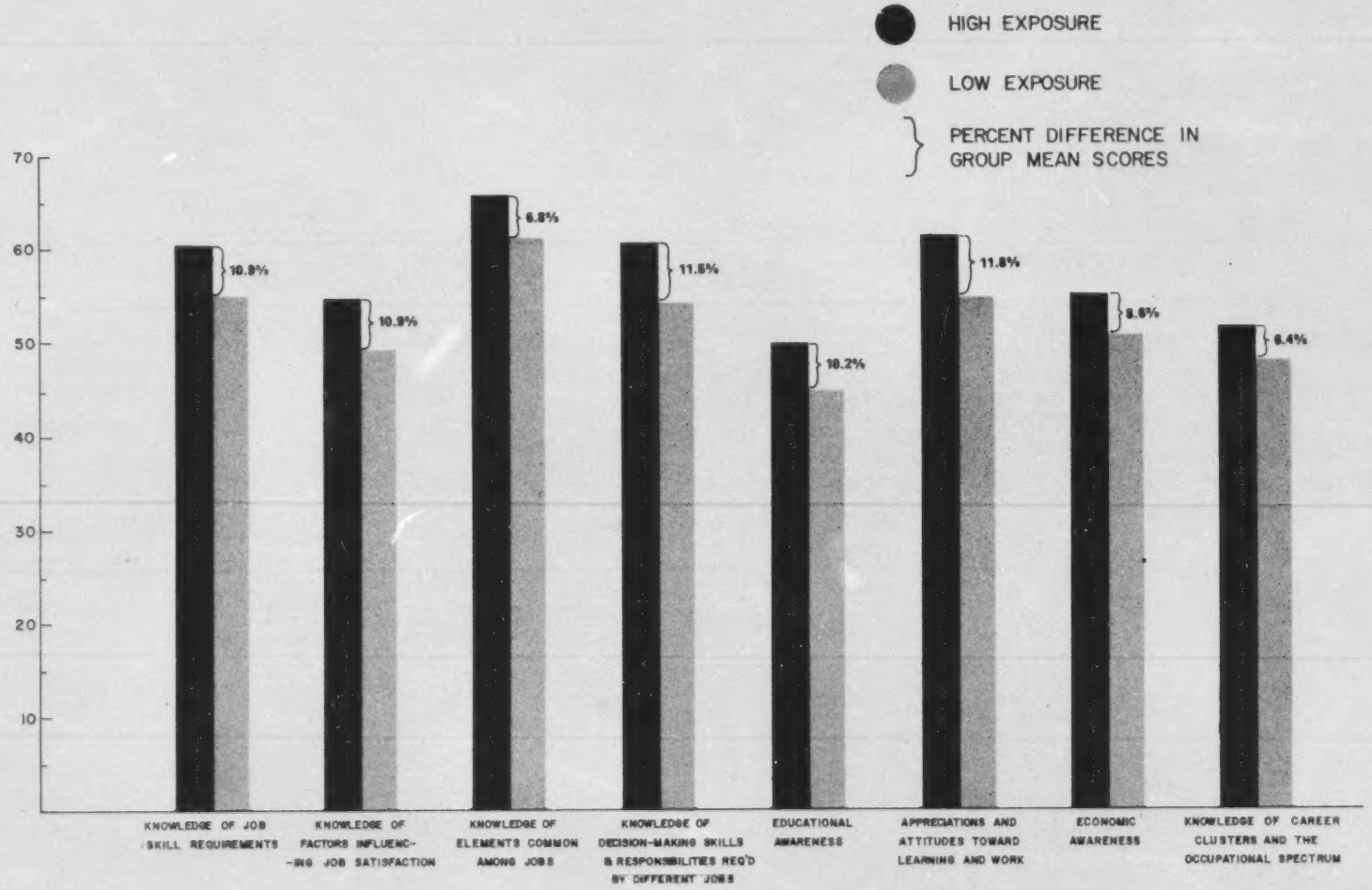


FIGURE 14 DIFFERENCES OF KNOWLEDGE ON DIMENSIONS OF THE WORLD OF WORK (ELEM-INTERMEDIATE)



dimensions, the low exposure group was even higher. This year, the percent difference always favors the high exposure group, and with the exception of employability skills and interest in the various occupational clusters, the observed differences are large. However, as was discussed earlier, although high career education exposure does not greatly influence the career interest spectrum of students, students with high exposure feel significantly better prepared to pursue career lines across the whole range of occupational clusters.

The trend among elementary and intermediate students replicates last year's findings (see Figure 14). The percent difference in means is always directionally favorable to the career education effort. The smallest differences occur in the areas of career cluster knowledge and knowledge about the common elements among occupations in a "job family." Even though the magnitude of the difference is not as great on these dimensions, it should be remembered that all mean differences are statistically significant.

Influence of Career Education Activities on the Students' Knowledge About the World of Work

A major question to be answered by any evaluation, once the outcomes are measured, is the question of what is it in the delivery system that accounts for the observed outcomes. Information of this nature allows project personnel to streamline the delivery system by making modifications consistent with those factors which the research demonstrates account most for the outcomes. In times of shrinking

resources, nothing is more crucial to continued program success than this type of feedback.

In this section of the report, careful attention is given to the relationship between exposure to a variety of career education activities and the outcome measures previously discussed; namely, most of the dimensions which are indicators of the career education elements at the heart of Arizona's statewide program. The findings are based on multiple and partial regression analysis. This procedure gives us an opportunity to examine the impact of each activity, while statistically controlling for the influence of other factors in the system. Data are reported in the tables so that a score of + indicates a positive, statistical relationship significant at .05; a score of ++ indicates a relationship statistically significant at .01; and a score of zero indicates no relationship between the variables.

The analysis in this section of the report is performed on the high exposure students only. Since it has already been established that there are positive outcomes based on exposure to career education, it would not be useful to include all students in an analysis designed to check out the efficacy of various features of the career education program.

Secondary Students

The data for secondary students shows the most effective career education activities are career fairs and occupational exploration kits.

These data are presented in Table 3. Knowledge of the world of work is also positively influenced by field trips and in-class work experiences. Two activities have a very weak positive influence at this grade level--vocational interest tests and career education films. Some significance should be given to the finding on the minimal effectiveness of films at this grade level for over twenty-six percent of the media in the Media Center is filmstrips. Also, this is the second year in which the data has shown filmstrips to be ineffective among secondary students.

Extensive measures were taken this year to improve the overall quality of guest speakers, and to monitor the format used by guest speakers at all grade levels. This has apparently paid off, for last year guest speakers did not have any positive influence on the students' knowledge of the world of work across all grade levels. The data this year shows that guest speakers were at least forty-two percent effective at the secondary level.

Comparing the data in Table 3 with last year's data shows there has been an overall positive strengthening of the effectiveness of guest speakers, in-class work experiences, occupational exploration kits, and career education games on the students' knowledge about the world of work.

Another way to look at the data in Table 3 is to analyze the effectiveness of each of the activities on a single dimension measuring

TABLE 3. INFLUENCE OF CAREER EDUCATION ACTIVITIES ON STUDENT KNOWLEDGE ABOUT THE WORLD OF WORK--WACOP HIGH EXPOSURE SECONDARY STUDENTS

	Field Trips	Guest Speakers	In-Class Work Exp.	Occup. Kits	CE Games	Interest Tests	CE Fairs	CE Films
Knowledge of Job Skills Requirements	0	0	0	+	+	0	+	0
Job Satisfaction	+	+	0	+	+	0	++	0
Common Threads	0	+	+	0	0	0	++	0
Decision Making	+	0	0	0	0	0	0	0
Educational Awareness	0	0	0	+	+	0	0	+
Appreciations & Attitudes	0	0	+	+	+	0	+	0
Economic Awareness	+	+	+	0	0	0	0	+
Knowledge of Career Clusters	+	0	0	+	0	0	0	0
Employability Skills	++	0	+	+	+	+	++	0

TABLE 3. (Continued)

	Field Trips	Guest Speakers	In-Class Work Exp.	Occup. Kits	CE Games	Interest Tests	CE Fairs	CE Films
Career Interest Spectrum	+	0	+	+	0	++	+	0
Career Mobility Awareness	+	+	0	+	0	0	+	0
Awareness of the Occupational Structure	0	+	++	0	0	0	+	0
Positive Influences	7	5	6	8	5	2	8	2
No Influence	5	7	6	4	7	10	4	10

knowledge of the world of work. This is done by summing the pluses in any single row. For example, if a counselor-consultant wants to assist a secondary teacher with activities that improve employability skills, the data in Table 3 suggests several appropriate activities. These are field trips, career fairs, in-class work experiences, occupational exploration kits, career education games, and career interest tests. Although the latter has an overall weak influence on student knowledge of the world of work, it has a positive impact on knowledge of employability skills. Decision making, on the other hand, seems to be relatively uninfluenced by most of the activities--field trips being the only exception. Careful attention should be paid to these data in preparing career education activities for different grade levels next year.

The data in Table 4 may be relevant to project staff in planning and developing activities for FY 76-77. It reports the relationship between the rate of exposure to a career education activity and the activity's overall contribution to the students' knowledge about the world of work. Both sets of data are presented in terms of rank order of significance.

The findings are similar to those reported for last year; namely, there are several mismatches between exposure and overall effectiveness. The most glaring of these occurs with career education fairs and filmstrips. Fairs are one of the two most effective activities, yet it

is the activity to which secondary students are least exposed. The relative infrequency of fairs, however, is understandable for they are the most logistically difficult activities to implement. The students, on the other hand, are exposed most to filmstrips, which are one of the two least effective activities.

TABLE 4. RANK ORDER OF EXPOSURE TO CAREER EDUCATION ACTIVITIES AND THEIR INFLUENCE ON STUDENT KNOWLEDGE ABOUT THE WORLD OF WORK

CE Activity	Rank Order of Exposure	Rank Order of Effectiveness
Films	1	6.5
Guest Speakers	2	5.5
In-Class Work Experience	3	4.0
Occup. Exploration Kits	4	1.5
Interest & Ability Tests	5	6.5
Field Trips	6	3.0
CE Games	7	5.5
CE Fairs	8	1.5

If these data are worked into the overall design for implementing career education at the secondary level next year, we may expect even more incremental gains than those found this year in comparison to last year's results.

Elementary Students

The data in Table 5 reports on the effectiveness of six types of career education activities on elementary and intermediate students. The most effective activities at this level are filmstrips and field trips, with career fairs showing an overall effectiveness rate of approximately sixty-three percent. The least overall effective activities are guest speakers, career education games, and occupational kits. There is remarkable consistency in the data for two years at this level, with the exception of career education films which mainly have a positive influence this year. The latter may be due to improved management in matching film presentations with student needs and logical growth patterns. Because of the availability of both speakers and films, there is a tendency to overuse these activities, and to be laxed in the control of the quality of the presentations. The data this year shows that the WACOP career education effort has done much to improve the quality of guest speaker presentations across all grade levels, and perhaps film presentations among elementary and intermediate students.

As with the data on secondary students, project personnel have an empirical basis for proposing specific activities to work on specific career education elements. This is done by summing the positive influences across the rows in Table 5. For example, at this level economic awareness is effectively influenced by field trips and filmstrips. While decision making is affected by all of the activities except occupational kits and career education games.

TABLE 5. INFLUENCE OF CAREER EDUCATION ACTIVITIES ON STUDENT KNOWLEDGE ABOUT THE WORLD OF WORK--WACOP HIGH EXPOSURE ELEMENTARY AND INTERMEDIATE STUDENTS

	Field Trips	Guest Speakers	Occupational Kits	CE Games	CE Fairs	CE Films
Knowledge of Job Skill Requirements	+	0	0	0	0	0
Job Satisfaction	+	0	0	+	++	+
Common Threads	++	0	+	0	++	0
Decision Making	++	+	0	0	+	++
Educational Awareness	0	0	+	+	0	+
Appreciation & Attitudes	0	0	0	0	++	+
Economic Awareness	+	0	0	0	0	+
Knowledge of Career Clusters	+	+	+	0	++	+
Positive Influence	6	2	3	2	5	6
No Influence	2	6	5	6	3	2

The results in Table 6 show the relationship between exposure to the various activities and overall effectiveness in conjunction with student knowledge about the world of work. The data are presented in rank order.

TABLE 6. RANK ORDER OF EXPOSURE TO CAREER EDUCATION ACTIVITIES AND THEIR INFLUENCE ON STUDENT KNOWLEDGE ABOUT THE WORLD OF WORK

CE Activity	Rank Order of Exposure	Rank Order of Effectiveness
Films	1	1.5
Guest Speakers	2	5.5
Field Trips	3	1.5
Occup. Exploration Kits	4	4.0
CE Games	5	5.5
CE Fairs	6	3.0

The greatest discrepancy occurs with guest speakers and career education fairs. The students receive the second most exposure to speakers, who are relatively ineffective at this level. However, there has been a lot of improvement from last year, primarily in shifting the influence of guest speakers from negative to neutral and slightly positive. Continued monitoring of guest speaker presentations in the coming

project year may even increase the positive influence of guest speakers more.

Students at this level, as their counterparts in grades eight through twelve, receive the least amount of exposure to career fairs, which have a relatively significant impact on overall knowledge about the world of work. However, again given the problems in logistics and the availability of the remaining activities either through the Media Center or the communities served by the WACOP project, it is unlikely that the presentation of career fairs can, or will, increase significantly next year.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

The evaluation of the Westside Area Career Occupations Project has focused on examining what aspects of the career education effort have had the most significant impact on students as well as measuring the specific outcomes related to the students' knowledge about the world of work. Last year, the evaluation pointed to several weaknesses in the WACOP delivery system, which suggested a number of recommendations to improve the program.

Most glaring among the weaknesses was the relative nondifferentiation between high and low exposure secondary students. Data related to the delivery system showed implementation was far more concentrated at the elementary and intermediate level. This year, systematic information, collected from the counselor-consultants on a monthly basis, indicates the delivery of career education is more evenly distributed among all grade levels in the catchment area. Concentrating the career education effort across all grade levels has worked. The most dramatic result this year is the consistent edge high exposure students demonstrate over their low exposure peers in the areas of career planning and preparation, generalized knowledge about the world of work, self-awareness and self confidence, and in their knowledge about several features of the occupational structure.

The weakest differences appear in the area of self-awareness and self-confidence, where the slight differences favoring the high exposure group are too modest to be significant. Self-awareness, in fact, is an area where career education has fallen short of the mark for several years. This may be partly due to the abstractness involved and the lack of definitive materials, commercial or project developed, related to self awareness. Significant efforts should be taken in the next project year to find ways to increase the students' self-awareness and particularly their self-confidence. It may be that project personnel need to turn away from purchased commercial materials and, instead, use their interpersonal skills as counselors to work on this crucial area of student development and preparation for adult life.

One of the most significant differences this year is the finding that although high exposure students are not different in their career interests from low exposure students, they feel uniformly better prepared to assume jobs in all of the career cluster areas. This finding is of added importance when we acknowledge that there are no population differences between the two groups aside from the amount and the quality of exposure to career education. This finding alone is a favorable endorsement of the effectiveness of the WACOP career education effort.

Involvement of school counselors in the overall career education effort is still a weak aspect of the WACOP career education program. However, this is fairly indicative of other career education projects,

which have undertaken similar evaluations. Most students, irrespective of career education exposure, do not utilize school counselors in conjunction with their educational and occupational plans. This trend has been repeated yearly ever since the first full-scale evaluation was implemented in Pima County in the Spring of 1973. The consistency of this finding at several sites throughout the State suggests the counseling and guidance students receive, directly or indirectly, through career education is indispensable. However, the certainty that career education will ultimately be phased out as an external educational program suggests there is an urgency to involve school counselors more effectively in the overall career education effort.

The data does show that students with career education are more satisfied with the contacts they have with counselors. This does not prove that the counselors are more involved in the career education effort at those schools, for the data on counselor-consultant contacts shows there is minimal involvement with school counselors. This finding, instead, may reflect greater student preparation in the general area of career awareness, which may result in more productive and satisfactory contacts with counselors among those students with the greatest career education exposure.

Over ten thousand pieces of career education materials were distributed through the Media Center this year. In addition, students in the catchment area were exposed to a variety of career education

activities. The activities were differentially effective at the various grade levels. Ironically, the activity with the greatest overall effectiveness across most of the grade levels was career fairs, which is the activity to which the students receive the least exposure. This finding is identical to the results last year. In last year's report, it was recommended that the WACOP project find ways to increase student exposure to career fairs. As a consequence, several more fairs were implemented this year. However, relative to other activities, the students still received the least exposure to career fairs. Given the logistical difficulties involved in presenting career fairs, it is not feasible to continue escalating the frequency of their presentation even though their effectiveness is quite high. At the same time, because of their effectiveness, the frequency of career fair presentations should be maintained at this year's level in the next project year.

Because of the ready availability of other career education activities such as guest speakers, filmstrips, and occupational exploration kits, efforts should be directed toward improving the overall effectiveness of these activities in the next project year. Some steps have been taken this year to better utilize guest speakers in the system. The results of this effort are encouraging, particularly at the secondary level, where guest speakers had an overall effectiveness rate of forty-two percent on the students' general knowledge about the world of work. Last year the effectiveness of guest speakers was nil

at the secondary level and negative among elementary and intermediate students. In contrast, the net effect of guest speakers this year is even slightly positive at the elementary and intermediate levels.

Finally, last year it was recommended that the WACOP project devise ways to increase parental involvement in the career education program. The basis of this recommendation is the consistent conclusion that parental input is the most influential factor on student aspirations and career choices. Steps were taken in this project year to accomplish this end. A significant number of counselor-consultant contacts centered around functions related to parental involvement. In fact, out of some forty thousand contacts, approximately twenty-five hundred were geared toward activities related to parental involvement. Parental involvement has also increased appreciatively in the rate of parent participation on various community advisory panels, which assist the project in achieving its goals. Thus, although the WACOP project has not introduced a formal training program for parents such as the one in Pima County, there is no doubt that considerable efforts have been expended this year to increase the visibility of parents in the career education process. Hopefully, this level of involvement will continue and even increase in the next project year.

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